INDIANA DEPARTMENT OF TRANSPORTATION

INTER-DEPARTMENT COMMUNICATION

Standards Section – Room N642

Writer's Direct Line
232-6775

September 1, 2005

DESIGN MEMORANDUM No. 05-30
TECHNICAL ADVISORY

TO: **All Design, Operations, and District Personnel, and Consultants**

FROM: ***/s/ Anthony L. Uremovich***
Anthony L. Uremovich
Design Policy Engineer
Contracts and Construction Division

SUBJECT: **Bridge Deck Overhang Width**

REVISES: **Indiana Design Manual Section 61-5.02**

EFFECTIVE: **Immediately**

Bridge deck overhang width restrictions apply only to a multi-girder type superstructure, as follows:

1. Empirical Deck Design Method. *LRFD Specifications* Article 9.7.2.4 defines the overhang width as the distance from the centerline of the outside beam to the outside coping of the deck. The overhang-width criteria are as follows:

   a. not less than 3.0 times the slab depth with a continuous concrete bridge railing or type TX railing present; or

   b. not less than 5.0 times the slab depth with any other type of bridge railing present.

2. Empirical or Strip Design Method. Overhang width is defined as the distance from the centerline of the exterior beam to the face of the deck coping. The suggested overhang-width criteria are as follows:

a. not more than 0.45 times the beam spacing;

b. not more than 0.85 times either of the following:
   (1) web depth for a steel beam or girder bridge;
   (2) beam depth for a concrete I-beam or a concrete bulb-tee beam bridge;

c. not more than 1500 mm.

The overhang width for a prestressed concrete box beam bridge should not exceed 600 mm from the edge of the outside beam.

If type OS deck drains are to be used on a beam or girder structure, the minimum overhang width should be 550 mm (1.80 ft) plus one-half the flange width. The deck drain locations should always be checked to verify that the drains clear the top flange.

alu

[F:\Des\Signed\0530-ta.doc]